DOCUMENT RESUME

ED 245 326 EA 016 866

AUTHOR Jordan, K. Forbis; McKeown, Mary P.
TITLE Fiscal Policy Implications of the Education Reform Reports.
PUB DATE 25 Apr 84
NOTE 22p.; Paper presented at the Annual Meeting of the American Educational Research Association (New Orleans, LA, April 23-27, 1984).
PUB TYPE Information Analyses (070) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Career Ladders; Compensation (Remuneration); Educational Change; Educational Environment; *Educational Finance; *Educational Improvement; Educational Innovation; Educational Needs; *Educational Objectives; *Educational Planning; Educational Policy; Educational Quality; Elementary Secondary Education; *Financial Policy; Incentives; National Programs; Performance; Professional Recognition; Professional Training; Program Evaluation; Recognition (Achievement); *Research Reports; *Resource Allocation; Teaching Conditions

ABSTRACT

This paper examines fiscal implications of five 1983 reports that recommend reform of America's schools. Greater rigor in curriculum and textbook content is a common report theme, while three call for specific graduation requirements. Generally, reports recommend increasing time for key courses and requiring regular homework, achievement tests, and definite policies on student conduct. Teachers' salaries are a universal concern, as are upgrading teacher preparation and recruitment. The fiscal implications vary. The Excellence Commission calls for the federal government, states, and localities to cooperate in areas of special-student needs, career ladders, and attractive incentives. The Twentieth Century Fund recommends the federal government assist poor and minority students, promote educational quality, fund a Master Teachers Program, and support research. The Education Commission of the States Task Force emphasizes that schools make the best use of resources and that states create career ladders and provide financial incentives. The National Science Board asks that states and local governments finance elementary and secondary education and that a National Education Council identify and monitor goals; federal monies should support certain activities. The Carnegie Foundation holds that citizens, school boards, states, and federal government should work in unison to promote excellence. Cost implications of the reports' recommendations are categorized under incremental, startup, interactive, and insufficient information headings. (KS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED245326

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Mary P. McKeown

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

FISCAL POLICY IMPLICATIONS OF THE EDUCATION REFORM REPORTS

K. Forbis Jordan*
Mary P. McKeown*

April 25, 1984

Presented at the 1984 Annual Meeting of the
American Educational Research Association

EA 016 866

*NOTE: This paper was prepared by the authors in their private capacity and does not represent the position of their employers.

FISCAL POLICY IMPLICATIONS OF THE EDUCATION REFORM REPORTS*

K. Forbis Jordan and Mary P. McKeown**

Background

Since the release of the first school reform report in the Spring of 1983, considerable national attention has been focused on the problems of America's public schools. The first report, "A Nation of Risk," (The National Commission, 1983) was released by the National Commission on Excellence in Education appointed by the Secretary of Education, Terrel Bell.

This report was followed by others from the Twentieth Century Fund (Peterson, 1983), Education Commission of the States (Task Force, 1983), National Science Board (1983), and the Carnegie Foundation for the Advancement of Teaching (Boyer, 1983). At the same time, John Goodlad from UCLA was finishing an extensive research study based on observations in 1,000 schools over a period of years. James Coleman's High School and Beyond Study is a continuing national study. Also, Mortimer Adler released the Paideia proposal for restructuring the curriculum in secondary schools. A study of high schools also has been conducted by Ted Sizer for the National Association of Secondary School Principals.

Even though these reports have received considerable public attention and have been an active topic of public discussion, such efforts are not unique.

---

* Presented at the 1984 Annual Meeting of the American Education Research Association.

** This paper has been prepared by the authors in their personal capacity and does not represent the position of their employers.

Reports about the condition of education in America appear with some degree of regularity. High schools have been the subject of such attention since their general establishment about the turn of the century. The reports illustrate one of the basic problems with the American educational system; the expectations of the American high school are very diverse. Some think that its primary role is to prepare students for college; others stress its socialization and personal development function; some desire that high schools create greater harmony among the various elements in the diverse American culture; and still others contend that the primary function of the high school is to provide youth with a salable skill for the world of work. Even though each of the expectations might be meritorious in its own right, it is difficult to accommodate all of them in a single institution.

Some observers of the American educational scene contend that the "periodic" school reform reports reflect the times in which they are written (James, 1983). For example, they claim that international competition, basic skills, and the academic curriculum become the focal points during conservative periods, and that improved educational opportunities for the disadvantaged and concerns about broader functions of schooling receive attention during liberal times. This scenario suggests that the recommendations are cyclical and are of questionable validity because they reflect forces outside of the school more than they do the schools and their problems.

Others contend that categorizations as conservative and liberal are an oversimplification. They contend that the emergence of the reports is indicative of a level of public concern about the way that schools are functioning (Passow, 1975). In this context, education reform reports provide some impetus for continuing educational change.

Rather than being based on extensive field research or the detailed analysis of a research data base, most of the current reports have relied on expert testimony, utilized already available research reports, or involved limited field visits. The exceptions are in the efforts of Coleman and Goodlad. Their efforts were based either on a large data base or extensive field observations.

Even though the reports appear to be directed at both elementary and secondary schools, the principal thrust of the recommendations has been on ways to improve America's high schools. Rather than calling for a dramatic restructuring in the operation of the schools, recommendations typically have been "additive" by calling for more courses, increased requirements, more time in school, pay raises for teachers, and increased requirements for teacher preparation programs.

For the policy maker audience, five reports encompass a broad range of recommendations and appear to have greatest relevance. Those are the ones from the Excellence Commission, Twentieth Century Fund, Education Commission of the States, National Science Board, and Carnegie Foundation. Each appears to have had a slightly different focus and to have been prepared for a particular audience. The Excellence Commission report referred to all types of schools and was a report to the President and the Nation's citizens. The Twentieth Century Fund report had a heavy urban emphasis and focused on the federal role. The report from the Education Commission of the States emphasized the importance of education to continued economic growth and was targeted for the business community and state and local public officials with responsibilities for schools. The National Science Foundation report focused on mathematics, science, and technology education with a series of recommendations for new federal programs. The Carnegie Foundation report addressed a broad range of educational concerns with recommendations for local, state, and federal officials.

The groups preparing the reports varied in terms of their professional background. Over one-half of the members of the Excellence Commission and the Carnegie Foundation group were active professional educators. Virtually all of the participants in the Twentieth Century Fund effort were drawn from the field of professional education. The Task Force for the Education Commission of the States included 14 business leaders, 13 governors, and 6 educators. Of the 20 members of the National Science Board Commission, 10 were from some portion of the scientific community.

Recommendations From the Reports

Rather than providing summary information on all topics in the five major reports, the criterion of an area having fiscal implications was used to delimit the discussion to the following topics: (1) content of the curriculum in the schools; (2) graduation requirements; (3) length of the school day and school year; (4) student performance; (5) teacher pay, preparation, performance, and position; and (6) fiscal impact.

CURRICULUM

In terms of detailed recommendations concerning curriculum, the reports stress the importance of student mastery of the traditional basics of English, social studies, science, and mathematics, but the "basics" are expanded to include computer literacy for all students and foreign language for the college bound. Two of the reports place heavy emphasis on the importance of the mastery of the English language--including speaking, reading, and writing. Higher levels of substance and rigor in curricular content are common themes among the reports.

As with the comments concerning curriculum in the schools, the reports have called for the content of textbooks to be upgraded and updated to assure more

rigorous content. Recommendations also call for greater care in textbook selection and increased involvement of teachers in selection decisions.

Each report contained recommendations about programs for special populations. Strong support was expressed for programs to educate the disadvantaged and the handicapped, and also the gifted and talented. Both the National Science Board and the Carnegie Foundation called for the establishment of a network of exemplary mathematics and science academies similar to the North Carolina School for Science and Mathematics, and the Twentieth Century Fund recommended small scale academies for talented students in urban areas.

GRADUATION REQUIREMENTS

Specific requirements for high school graduation were proposed in three reports. The Excellence Commission and the National Science Commission reports called for three years each in science and mathematics and one semester of computer science. The Carnegie Foundation report recommended the inclusion of a series of one semester units consisting of a seminar on work, a senior year independent social issue project, and a "new Carnegie unit" that would be a service requirement involving school or community volunteer work.

LENGTH OF SCHOOL DAY AND YEAR

Four reports contended that the time students spend in school should be increased or that better use should be made of the currently available time. The Excellence Commission called for 7-hour school days and 220-day school year. The National Science Board called for increases in the amount of time allocated to science, mathematics, and technology in grades K-12. The Education Commission of the States recommended that schools review the content in each school year to ensure that current time was not wasted, with special attention being given to

the relative value of the senior year in high school. The Carnegie Foundation report proposed that large high schools (over 2,000 students) be organized into smaller units, operating on the school within a school model; this report also recommended that class schedules be arranged more flexibly to permit larger blocks of instructional time for certain courses.

STUDENT PERFORMANCE

The Excellence Commission, Education Comission of the States, and National Science Board reports recommended regular homework for all students. Mention also was made of the importance of effective study and work skills. Stress was placed on the need to give greater attention to the use of standardized tests in identifying students with problems and determining whether or not students should be promoted. The reports were in general agreement that promotion and graduation policies should be based on general acheivement and mastery of specific skills rather than chronological age. In addition, stress was placed on the importance of student attendance and the need to reduce student absenteeism and tardiness. In keeping with these recommendation, four reports strongly recommends that firm and explicit policies on student conduct be adopted and enforced, with one report recommending changes in state laws if necessary.

Guidance services did not receive significant attention in three reports, but were addressed by the National Science Board and the Carnegie Foundation. The contentions were that programs should promote the elimination of discrimination in course selection, inform students about college entrance requirements, and develop referral services with other community agencies.

TEACHERS

Concerns about teachers were common themes among all of the reports. The need to increase the pay for teachers was a recurring item. The basic recommendations were that salaries be increased so that they are competitive with comparable jobs, are sensitive to supply and demand in scarcity areas, and reward those who are high performers. Summer employment and the lengthened school year have been proposed as two ways to increase pay for all teachers, but most of the reports also have called for the introduction of a master teacher or merit pay program that would consider performance as well as training and experience in determining a teacher's salary. For those teachers designated as "master teachers," the assumption is that they will be given additional duties working with other teachers. Other teacher pay-related proposals include financial awards to recognize outstanding teachers and salary differentials for teachers in shortage areas.

A second concern about teachers was the need to upgrade their preparation. The reports call for greater attention to be given to the recruitment of quality students into teacher preparation programs and for teachers to be required to demonstrate competence in their academic discipline. Four reports call for the redesign of teacher preparation programs, with one calling for a five-year teacher education program. Proposals include raising admission standards, imposing exit standards, and judging institutions on the performance of their graduates. As an incentive to attract more able persons into teaching, four reports recommend either loans or scholarships, with service requirements, for prospective teachers. The Carnegie report proposed that federal funds be used to start a National Teacher's Service scholarship program to encourage able persons to enter teacher education programs.

The third teacher-related concern was the position, or status, of teachers. Recommendations advocated reducing the student load of teachers, minimizing interruptions and extra duties, providing more planning time, and taking other steps to improve working conditions.

Of all topics covered in the reports, concern about teacher performance has possibly received greatest public attention. By basing pay on performance, the intent is to reward the superior teacher, encourage the average teacher, and either improve or terminate the poor teacher.

Of the four "P's" related to teachers (pay, preparation, performance, and position), the Carnegie report indicated that improvements in the position, or status, of the classroom teacher was especially critical in efforts to improve performance and retain quality teachers. Most of the reports stressed the need to improve leadership and management at the school level. Concerns include granting more power to building principals and placing greater responsibilities on principals for improving working conditions for teachers and providing leadership for the school program.

FISCAL IMPACT

The major reports include some recommendations that have a potentially significant fiscal impact and others that appear to have little or no fiscal impact. Implementation of some recommendations would require modifications of some facet of the educational delivery system, personnel procedures, or educational programs. In some instances, resources might be found through reallocation, but in others, additional funds would appear to be necessary. In the following discussion, those recommendations with fiscal implications are presented for each of the major reports.

Excellence Commission. This report calls for citizens to provide the fiscal support and stability required to bring about the reforms. The Federal Government, in cooperation with states and localities, would help meet the needs of key groups of students such as the gifted and talented, socioeconomically disadvantaged, minority and language minority students, and the handicapped. The Federal Government's role would include several functions of national consequence that states and localities are unlikely to be able to meet: protecting the constitutional and civil rights of students and personnel; collecting data, statistics, and general information about education; supporting teacher training in these areas of shortage or key national needs; and providing student financial assistance and research and graduate training. Assistance would be provided with a minimum of administrative burden and intrusiveness.

School boards, administrators, and teachers would cooperate to develop career ladders for teachers that distinguish among the beginning instructor, the experienced teacher, and the master teacher. Teacher salaries would be increased and made professionally competitive and market sensitive. School boards would adopt an 11-month contract for teachers. Teacher salaries would be performance based. Incentives, such as grants and loans, would be made available to attract outstanding students into the teaching profession.

Twentieth Century Fund. The Federal Government is called upon to continue its support for programs to meet the special needs of poor and minority students while taking the lead in meeting the general and overwhelming need for educational quality. Categorial programs required by the Federal Government would be funded through the Federal Treasury. Federal efforts to provide special education programs for the poor and the handicapped would be continued. Special Federal Fellowships would be awarded to students to encourage the creation of small,

individualized programs staffed by certified teachers and run as small-scale academies.

A national Master Teachers Program would be established, funded through the Federal Government, that recognizes and rewards teaching excellence. Master teachers would be awarded a grant of $40,000 per year for a period of 5 years. In addition, an incentive approach would be adopted to provide awards to teachers of exceptional merit; awards would be numerous enough to attract national attention and substantial enough to keep the master teachers in the classroom. A scholarship program would be used to augment the supply of teachers in mathematics and science as well as in the foreign languages.

The report also contends that the Federal Government has a responsibility to help overcome the unevenness of state efforts to fund education. The Federal Government would promote and support proficiency in English for all children in the public schools, but especially for those who do not speak English, or have only a limited command of English.

Federal attention and assistance would go to economically depressed localities with concentrations of immigrant and/or impoverished groups as well as those who already are making strong efforts to improve their educational performance. The Federal Government would emphasize programs to develop basic scientific literacy among all citizens and programs to provide advanced training in mathematics and science for secondary school students. Federal support would be provided for specific research activities such as basic data, educational performance, evaluation of federal education programs, and fundamental research into learning processes.

Education Commission of the States Task Force for Economic Growth. This report calls upon schools to make the best possible use of resources. More funds would be needed from all sources for selective investments in efforts that promote

quality. The contention is that the Federal Government has an essential supporting role in financing education. States and localities would have the chief responsibility for supporting the schools and making educational policy. States would continue efforts to secure more equitable distribution of educational resources. More human, financial, and institutional resources would be invested in education.

States would create career ladders for teachers. Each state would substantially restructure and renew its teacher training curriculum, and upgrade the academic quality of the teacher training curriculum so that entering teachers will meet higher standards. Every state and local school district, with the fullest participation of teachers, would drastically improve methods for paying teachers. Financial incentives for teachers would be keyed to differing responsibilities and to filling critical needs in certain subject areas. Scholarships and other financial incentives would be used to attract the most able people into teaching.

National Science Board. Under this report, state and local governments should bear most of the expense of elementary and secondary education, with federal funds being used to address critical national issues. The President would appoint a National Education Council consisting of representatives from a cross-section of national interests. This group would identify national educational goals and assessment mechanisms for every state, school district, and school; and monitor and report annually on the status of American eduation and its progress toweard the goals. The Federal Government would have the unique role in ensuring access to equal educational opportunity in its broadest sense. The National Science Foundation would develop and evaluate technology courses and programs.

Federal funds would be used to support (a) museum education activities in mathematics, science, and technology; (b) a network of exemplary schools in mathematics, science, and technology with 1,000 exemplary elementary and 1,000 similar secondary schools; (c) summer and in-service teacher training programs in mathematics, science, and technology; (d) teacher training programs using information technologies; (e) science television broadcasts; and (f) research on teaching and learning at the basic and classroom levels, with particular attention to the integration of educational technology into the educational process.

Each state would appoint a representative Governor's Council to develop and monitor educational goals and make recommendations for improving education. Each state would develop at least one regional resource center for mathematics and science teachers. The centers would encourage participation by business, educators, and government, and include assistance in technology instruction.

States and local governments would provide opportunities for high quality teachers to move up in salary and status without leaving the classroom. Schools should explore means of adjusting pay in order to compete for and retain teachers in shortage areas. Stipends would be provided for summer institutes and other activities. Working conditions, salary levels, comparability, length of school day/week/year, tenure provisions, and promotion procedures would be reviewed as aspects of teacher pay.

Carnegie Foundation. This report calls for citizens, local school boards, state agencies and legislatures, and the Federal Government to work together to help bring excellence to the Nation's public schools. Federal funds for the education of the disadvantaged would be increased to a level that would provide programs for all eligible students.

Federal funds would be used to establish (a) ten Technology Resource Centers on university campuses; (b) regional networks to provide computerized library

services to schools; (c) a National Film Library to secure and make available outstanding films and television programs; (d) a national network of residential science and mathematics academies; and (e) a National Teacher's Service scholarship program. In addition, a federal school building and equipment loan fund would be created to provide funds for updating laboratories and rehabilitating schools.

The Department of Education would expand its survey of high school students to include a sampling of graduates from all high schools at four year intervals to learn about post-high school placement and experiences. The overriding responsibility of states would be to establish general standards and provide fiscal support.

Colleges and universities would aid the top 5 percent who plan to teach, and a federal prospective teacher scholarship program would be started. After credentialing, teachers would have the opportunity to pursue a career path, moving from associate teacher to senior teacher. The average salary for teachers would be raised by at least 25 percent beyond the rate of inflation. A base salary plus cost-of-living adjustments and merit increases would be provided. Competitive grant "Teacher Excellence Funds" would be established in every school. Travel funds and summer study grants would be provided for experienced teachers.

Potential Cost

Some introductory caveats are essential before any discussion of the potential cost of implementing any of the reform recommendations. For some reforms (referred to as Group A), the cost estimate can be determined with a relatively high level of accuracy because the recommendation would involve an indentifiable policy change that would occur in an incremental manner. For other reforms (referred to as Group B), an initial start-up cost would be required, but the

subsequent implementation is projected to result in a reallocation of existing resources with little or no additional cost accruing as a result of the implementation of the recommendation. The cost of another group of recommendations (referred to as Group C) likely would have a random impact because the cost would be dependent upon interactive policy decisions that likely would be made in a different manner by both state and local education decision makers. A fourth group (referred to as Group D) would be subject to interpretation because of the lack of precise details about the recommendation.

Group A (incremental) would include such recommendations as National Teacher Service from the Carnegie Foundation, most of the recommendations from the National Science Board Commission, and some of the research efforts recommended by the Carnegie Foundation. Some of the school day, school year, teacher pay, and scholarship recommendations might also be included in Group A. For example, the Carnegie Foundation recommends that the average salary for teachers be raised by at least 25 percent beyond the rate of inflation.

Group B (start up) might include those recommendations related to revision of teacher education programs and some of the merit pay/master teacher programs. Other recommendations with possible "start-up" costs include those related to curriculum reform or graduation requirements.

Group C (interactive) would include the various recommendations related to the role and responsibility of citizens in providing adequate funds for education. Specific examples include incentive recognition programs for teachers and the teacher pay recommendations that call for teacher salaries to be "competitive."

An obvious Group D example (insufficient information) would be the recommendations for a federal master teacher program from the Twentieth Century Fund report. The report recommends a pay level of $40,000 per year for 5 years, but fails to indicate the number of potential recipients.

National organizations have attempted to develop estimates of the possible costs of various recommendations. Implementation of any of the major recommendations would appear to be very expensive and difficult to project (Stanford, 1983). For example, the American Association of School Administrators has estimated that 27 percent in additional funds would be required to lengthen the school day and school year, and to pay market-sensitive salaries to teachers (AASA, 1983). Using the projected 1982-83 expenditures for elementary and secondary education of $117 billion from the National Center for Education Statistics, these reforms would cost over $30 billion for the Nation (NCES, 1983).

Estimates from the Education Commission of the States report that raising all teacher salaries by $10,000 per year would cost about $20 billion for the Nation. The same report indicates that increasing the school day and the school year would cost in excess of $20 billion each, with the three recommendations costing nearly $60 billion, or a 50 percent increase in school expenditures (Toch, 1983).

In its analysis of the Excellence Commission Report, the National Education Association (1983) suggested spending implications for each of the following recommendations:

Spending Implications Suggested by the National Education Association

Recommendations	Cost (in billions)
Eleven-month contract for all teachers	5.3
Competitive salaries for teachers	8.6
Salary bonus for master teachers	0.2
Total	$14.1

The National Education Association analysis made no allowance for additional salary payments attributable to extending the school day.

The only report that included a cost of implementing the recommendations was from the National Science Board, and the reference was to the additional federal funds required for specific recommendations. The amount was 1.5 billion (National Science Board, 1983).

These examples have been presented to illustrate the difficulties inherent in any projections. First, because of data limitations, projections of potential impact must be made on a macro basis and consequently will not be precise at the state or local level. Second, some of the recommendations fail to indicate the magnitude of involvement that would occur should they be implemented fully. Third, any determination of the unit cost for some recommendations must be made on an arbitrary basis. Fourth, even projections of incremental recommendations assume certain behaviors on the part of both employers and employees and students and school programs, and these assumptions typically are not based on either past experience or consideration of alternative scenarios.

Conclusions

Conclusions related to the implications of the recommendations for the allocation or reallocation of current fiscal resources include the following:

1. Recommendations from all five reports support the continuation of current federal programs for special populations and the continuation of traditional federal data gathering and research functions.

2. The Excellence Commission and the ECS reports call for citizens and state and local officials to address the issue of additional funds for education.

3. Current federal policies and programs for bilingual education would be affected by the implications of the recommendations from the Twentieth Century Fund's position about the primacy of English.

4. In view of the scarcity of fiscal resources in many states and local school districts, incentive programs may be needed to encourage the introduction, or study of the implications, of the reform proposals.

5. Operationalizing the emphasis of the reports on the gifted and talented likely would result in some modification of the focus of federal programs that have been designed to increase access for underrepresented groups.

6. As to the "time" recommendations, implementation of the extended day likely would require additional staff or overtime pay for current staff, and the lengthened school year likely will require increases in the base salary. The counter position is that the uses made of existing time should be analyzed to determine how that currently available time may be used more efficiently and effectively.

7. Recommendations for differential pay may face problems unless sufficient funds are provided to raise the salaries for all teachers when the master teacher or merit pay programs are implemented.

8. Modifications may be required in those state funding programs that base the allocation of state funds on factors related to the training and experience of the school district's professional staff.

9. Either federal or state action may be required to provide the incentives that will encourage local school districts (a) to increase the number of hours of instruction in the school day and the number of days in which school is in session; (b) to increase graduation requirements; and (c) to implement master teacher, career ladder, merit pay, or related programs.

10. The reports do not call for a dramatic expansion of the federal role or for large increases in Federal funds, but implementation of most of the recommendations will be difficult for state and local agencies without additional funds from some source.

Educational Significance

The purported decline in the quality of American elementary and secondary education has been a matter of public concern for several years. As efforts to address a range of educational problems, the recently released education reform reports have received considerable attention in the print and electronic media.

Various reports have called for significant "additions" to the schooling process, but none has called for additional fiscal resources in amounts sufficient to fund the various recommendations. If school officials should proceed to implement the reports, a lingering concern is that the imposition of greater rigor and the emphasis on "college prep" courses may increase the educational problems of disadvantaged youth, or may result in requirements for even more additional funds as increased attention is given to ways in which schooling can be individualized to accommodate the differences among students.

If public officials seek to implement the "cost related" recommendations without additional resources, fiscal planners likely will be confronted with the necessity to reallocate current funds. An alternative position is that the public will be willing to provide additional funds for education when the educational enterprise has reorganized itself in a manner consistent with the principal recommendations in the various reports.

References

Adler, Mortimer J. Paideia Problems and Possibilities. New York: Macmillan, 1983.

American Association of School Administrators (AASA). The Cost of Reform: Fiscal Implications of "A Nation at Risk". Arlington, VA: AASA, November, 1983.

Boyer, Ernest L. High School: A Report on Secondary Education in America. New York: Harper and Row, 1983.

James, Thomas and David Tyack. Learning from past efforts to reform the high school. Phi Delta Kappan, February, 1983.

National Education Association (NEA). Spending and Taxing Implications of the Report of the Commission on Excellence in Education. Washington: NEA. April 28, 1983.

National Center for Education Statistics (NCES). Condition of Education. Washington: U.S. Government Printing Office, 1983.

National Science Board. Educating Americans for the 21st Century. Washington: National Science Foundation, 1983.

Passow, A. Harry. Once again: reforming secondary education. Teachers College Record, December, 1975.

Peterson. Paul E. Making the Grade. New York: The Twentieth Century Fund, 1983.

Stanford, Rochelle L. The reports are in, but nobody knows how to pay the costs of better schools. National Journal, October 15, 1983. pp. 2104-2108.

Task Force on Education for Economic Growth. Action for Excellence. Denver: Education Commission of the States, 1983.

The National Commission on Excellence in Education. A Nation at Risk: The Imperative for Educational Reform. Washington: U.S. Government Printing Office, 1983.

Toch, Thomas. Longer year, higher pay to be costly, study says. Education Week, October 12, 1983, p. 1, 19.